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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/674,112	09/29/2003	Jordi Ferran	200208374-1	2433

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FORT COLLINS, CO 80527-2400

EXAMINER

SHAH, MANISH S

ART UNIT	PAPER NUMBER
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2853

DATE MAILED: 04/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

HA

Office Action Summary

Application No.

10/674,112

Applicant(s)

FERRAN ET AL.

Examiner

Manish S. Shah

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) 13-37 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 1-4 & 12 are rejected under 35 U.S.C. 102(e) as being anticipated by Steinfield et al. (# US 6508552).

The applied reference has a common Assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention “by another,” or by an appropriate showing under 37 CFR 1.131.

Steinfield et al. discloses an ink drying system (element: 260; figure: 2) for printer (figure: 2) including an IR heating element (column: 6, line: 47-51); a guide, to concentrate heat energy from the IR heating element on print media (figure: 2-3, 6-10); and a controller procedure to control operation of the IR heating element (figure: 12). They also disclose that the printer additionally includes sensors (element: 270; figure: 2,

3, 8) in communication with the controller procedure, to measure relative humidity and temperature (column: 9, line: 25-65). They also disclose the controller procedure additionally considers print data as a constraint to control operation of the IR heating element (figure: 12, column: 9, line: 25-65). They also disclose that the guide includes a page width array of IR heating elements and guides and wherein the page width array located in a rearward position, configured to warm print media after application of ink (element: 260; figure: 2, 6, 9, 10).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-7 & 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takabayashi (# US 2003/0222960 A1) in view of Steinfield et al. (# US 6508552)

Takabayashi discloses an ink drying system for printer including an heating element ([0081], [0095]); a guide, to concentrate heat energy from the heating element on print media; and a controller procedure to control operation of the heating element (figure: 1, 3).

- The heating element is located on a print carriage (figure: 1-4).

- The heating elements are located on both sides of print head carried by print carriage (figure: 1-4).

- The guide includes a light pipe, carried by carriage and configured to direct energy toward print media adjacent to a print head carried by the carriage, wherein light pipe includes a collector; a pipe, in communication with the collector; and an emitter in communication with the pipe (figure: 1).

- The guide includes a collimator to direct energy in a substantially straight line, substantially parallel to a carriage rod upon which a print head travels; and light pipe, movable along a carriage supporting the print head to receive energy from the collimator and to deliver energy to print media adjacent to the print head (figure: 1-4).

- The guide includes a page width array of heating elements and guides; wherein page width array is located in forward or rearward position (figure: 1-4).

Takabayashi differs from the claim of the present invention is that (1) the heating element is IR heating element. (2) the ink drying system includes sensors in communication with the controller procedure to measure relative humidity and temperature. (3) The controller procedure causes the IR heating element to put out more heat in locations on the print media where print data indicate extensive use of ink than in locations where the print data indicate moderate use of ink.

Steinfeld et al. discloses an ink drying system for printer including an IR heating element (element: 260, figure: 2); a guide, to concentrate heat energy from the IR heating element on print media; and a controller procedure to control operation of the IR heating element (figure: 12).

- The ink drying system includes sensors in communication with the controller procedure to measure relative humidity and temperature (element: 270, figure: 2,3,8; column: 9, line: 25-65).

- The controller procedure causes the IR heating element to put out more heat in locations on the print media where print data indicate extensive use of ink than in locations where the print data indicate moderate use of ink (figure: 12).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Takabayashi by the aforementioned teaching of Steinfield et al. in order to dry only the location having ink marks with optimized energy output, which gives a high quality printed image.

3. Claim 8 is rejected under 35 U.S.C. 103(a) as being obvious over Steinfield et al. (# US 6508552) in view of Hilton et al. (# US 3584389).

The applied reference has a common Assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and

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reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). This rejection might also be overcome by showing that the reference is disqualified under 35 U.S.C. 103(c) as prior art in a rejection under 35 U.S.C. 103(a). See MPEP § 706.02(I)(1) and § 706.02(I)(2).

Steinfeld et al. discloses the all the limitation of the ink drying system except that the guide includes a reflector to direct IR energy to print media to a printhead.

Hilton et al. teaches that to get the substantial uniform radiation to the image, the guide includes a reflector to direct IR energy to print media (column: 2, line: 10-20; 40-65).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the ink drying system of Steinfeld et al. by the aforementioned teaching of Hilton et al. in order to have the substantial uniform radiation to the image, which give high quality printed image.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Manish S. Shah whose telephone number is (571) 272-2152. The examiner can normally be reached on 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen D. Meier can be reached on (571) 272-2149. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Manish S. Shah
Primary Examiner
Art Unit 2853

MSS

4/13/06